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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,877	09/06/2005	Jean-Luc Dubois	034296-024	5557

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EXAMINER	
PUTTLITZ, KARL J	

ART UNIT	PAPER NUMBER
1621	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/526,877	DUBOIS ET AL.	
	Examiner	Art Unit	
	Karl J. Puttlitz	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *28-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/21/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "is comprised" throughout the claims is indefinite since it is unclear what other values are included by the open language "comprised".

Terms beginning with the article "the" in claims 41, 45, 53, 54 and 60 lack antecedent basis where these terms have not been introduced one or more times in a preceding limitation.

In claim 53, the term "if appropriate' is indefinite since it is unclear what conditions would require the cocatalyst of formula (II), or an inert gas (step 4).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28-39 and 43-45 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent Application Publication No. 2003/0088124 to Dubois (Dubois).

The rejected claims cover a method for the production of acrylic acid from propane, in which a gaseous mixture comprising propane, molecular oxygen, water vapour, and optionally an inert gas is passed over a catalyst with a particular formula (I), see claim 28.

The rejected claims also cover certain process parameters for the claimed oxidation reaction.

The rejected claims also cover a a catalyst regeneration stage.

With regard to the above embodiments, Dubois teaches a method for the production of acrylic acid from propane using the claimed catalyst, see paragraphs 0014-0020.

The required process parameters are given at paragraph 0039+.

A catalyst regeneration step is also disclosed at paragraph 0045+.

Product and by-product recycling is taught at paragraph 0054.

The foregoing anticipates the rejected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubois.

The rejected claims cover embodiments for the catalyst regeneration.

Those of ordinary skill would have been motivated to modify the disclosure of Dubois to include the specific catalyst regeneration steps set forth in the rejected claims since using a series of reactors to run the reaction to completion, and recycling of a catalyst from a regenerator are in the interest of optimizing the process.

Claims 46-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubois in view of FR 2833005, as evidenced by counterpart U.S. patent Application Publication No. 2005/0054880 to Dubois et al. (Dubois II).

The rejected claims cover those embodiments requiring the presence of a cocatalyst of formula (II), see claim 46. Dubois fails to explicitly teach the required cocatalyst. It is for this proposition that the examiner joins Dubois II. In this regard, Dubois II teaches the required cocatalyst at paragraph 0012+, for the preparation of acrylic acid from propane, see paragraph 0002.

Those of ordinary skill would have been motivated to modify Dubois to include the required catalyst since Dubois II teaches that these catalyst are efrective in the claimed process, and moreover, are effective as cocatalyst with the type of catalyst of formula (I), see paragraph 0059. Therefore, the rejected claims are prima facie obvious

in view of the combination of Dubois and Dubois II since these references teach or suggest the elements of the rejected claims with a reasonable expectation of success.

With regard to the catalyst regeneration steps, those of ordinary skill would have been motivated to modify the disclosure of Dubois and Dubois II to include the specific catalyst regeneration steps set forth in the rejected claims since using a series of reactors to run the reaction to completion, and recycling of a catalyst from a regenerator are in the interest of optimizing the process.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 28-63 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 28-63 of copending Application No. 10/526879. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the conflicting application, also recite a method for the production of acrylic acid from propane, in which a gaseous mixture comprising propane, water vapour, and optionally an inert gas is passed over a catalyst with a particular formula as presently claimed, notwithstanding the fact that molecular oxygen is optional in the reaction mixture.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 28-63 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/497,210. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the conflicting application, also recite a method for the production of acrylic acid from propane, in which a gaseous mixture comprising propane, water vapour, and optionally an inert gas is passed over a catalyst with a particular formula as presently claimed, and therefore render the instant claims prima facie obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at telephone number (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl J. Puttlitz
Assistant Examiner